



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,891	08/20/2003	Steven M.H. Wallman	1061/6	6367
MICHAEL P. FORTKORT PC 13164 Lazy Glen Lane Oak Hill, VA 20171				
7590 01/02/2009				
EXAMINER				
LOFTUS, ANNE				
ART UNIT		PAPER NUMBER		
3692				
MAIL DATE		DELIVERY MODE		
01/02/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/644,891

**Applicant(s)**

WALLMAN, STEVEN M.H.

**Examiner**

ANN LOFTUS

**Art Unit**

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 28-34 and 55-60 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7, 28-34 and 55-60 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of the Claims***

1. This action is in response to an amendment filed on 10/17/08. Claims 1-7, 28-34 and 55-60 are pending. Claims 8-27 and 35-54 are cancelled.
2. The application was filed on 8/20/03 with provisional dated 8/20/02.

### ***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/08 has been entered.

### ***Response to Arguments***

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. The applicant amended to specify a plurality of assets/rights/ and liabilities in the portfolio.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-7 and 55- 60 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A claimed process is eligible for patent protection under 35 U.S.C. § 101 if:

"(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. See Benson, 409 U.S. at 70 ('Transformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines. '); Diehr, 450 U.S. at 192 (holding that use of mathematical formula in process 'transforming or reducing an article to a different state or thing' constitutes patent-eligible subject matter); see also Flook, 437 U.S. at 589 n.9 ('An argument can be made [that the Supreme] Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a 'different state or thing' '); Cochrane v. Deener, 94 U.S. 780, 788 (1876) ('A process is...an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.').<sup>7</sup> A claimed process involving a fundamental principle that uses a particular machine or apparatus would not pre-empt uses of the principle that do not also use the specified machine or apparatus in the manner claimed. And a claimed process that transforms a particular article to a specified different state or thing by applying a fundamental principle would not pre-empt the use of the principle to transform any other article, to transform the same article but in a manner not covered by the claim, or to do anything other than transform the specified article." (*In re Bilski*, 88 USPQ2d 1385, 1391 (Fed. Cir. 2008))

*Bilski* further says that the particular machine or apparatus or transformation must be central to the purpose of the claimed process, and not mere extra-solution activity such as gathering data or recording results. Claims 1-7 and 55-60 are not tied

to a particular machine or apparatus nor do they transform a particular article into a different state or thing; therefore, claims 1-7 and 55-60 are non-statutory under § 101.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 55-60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 55, the purpose of the claim is to create a portfolio having a specified riskiness characteristic. As currently worded, the claim does not accomplish the purpose, thus one of ordinary skill would not be able to use it as intended. The following interpretation shows the gaps in the language that render the claim not enabled.

Posit a desired portfolio of 100 units of Chrysler and 100 units of IBM. The claim recites obtaining a desired riskiness characteristic for this desired portfolio. Presume the user desires a riskiness characteristic of 83. In the next step, a predetermined portfolio is provided; say 100 units of GM and 100 units of AIG, with a predetermined riskiness characteristic of 35. The first question is if the riskiness characteristic depends on the method of purchase (margin or leverage), then how can a portfolio have a

predetermined (fixed?) riskiness characteristic without a specific purchase method or level of margin or leverage?

The next step is to compare the desired 83 to the predetermined 35, and since 83 is higher, determine how much of the predetermined portfolio (GM + AIG) must be purchased on margin so that a resulting portfolio has a riskiness characteristic of 83. At this point, the user has not been recited as owning anything else, so the resulting portfolio would consist only of what was purchased as the result of the purchase. Let's say that the determination says that 17 units of the predetermined portfolio (GM + AIG) purchased on margin will result in a portfolio of riskiness characteristic 83. In the last step, the user purchases 17 units of desired Chrysler and IBM on margin. Because this is not the desired portfolio, the resulting riskiness characteristic has not been determined. A person of ordinary skill in the art at the time of the invention would not know how to determine risk for buying GM and AIG, and then use it to buy Chrysler and IBM, and hit the same riskiness characteristic.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-7, 34 and 55-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites purchasing a plurality of assets/rights/liabilities in order to create a resulting portfolio. The portfolio goes from zero assets to some allocation of assets

upon purchase, yet the claim recites that this happens without modifying the allocation. If the plurality consists of two items, then unless the two items are bought simultaneously (under a coordinated definition of moment of purchase) the allocation will be modified from a first allocation of zero, to a second allocation of a certain amount of the first item, to a third allocation of a certain amount of the first item and a certain amount of the second item. It is unclear how this could happen without modifying the allocation of the resulting portfolio.

As to claims 7, 34 and 55, the claims recite providing a predetermined portfolio. Are the assets given away to the user? Then why are they later purchased? The specification discusses providing a description or specification of a portfolio, as opposed to actually providing or giving away assets. The claim is unclear as to what actual steps are done for "providing".

As to claims 7 and 34, it seems that the user specifies a risk for a combination of the recommended portfolio and the user investment funds, then the amount to buy is determined, then the user buys the determined amount along with an (additional?) amount of the predetermined portfolio ... purchased with the user's investment funds. The phrase "along with an amount of the predetermined portfolio purchased with the user's investment funds" is confusing. Is an additional amount purchased beyond the amount determined to match the riskiness characteristic? If it was already purchased with the user's investment funds, then who is purchasing it now? The claim is unclear as to who or what is purchased in this clause.

As to claim 55, the above example of Chrysler, IBM, AIF and GM shows that the claim is unclear as to the relationship of the portfolios cited. A predetermined riskiness characteristic of a portfolio is recited. If a riskiness characteristic depends on the purchase method or margin, then how can a portfolio have a predetermined riskiness characteristic?

The remaining claims listed are rejected as inheriting the problems cited.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3, 6, 7, 28-30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application 2001/0042036 filed by 1/25/2001 by Sanders, in view of US Patent 6078904 filed 3/16/98 by Rebane and further in view of Rangen.

Rangen refers to a quote from Stephen Thorlief Rangen, Securities Exchange Act Rel. No. 38486 (Apr. 8, 1977), 64 SEC Docket 731, 736. It was quoted in footnote 27 of Canady, Securities Exchange Act Rel. No. 41250 (April 5, 1999), which is provided to the applicant.

As to claims 1, 7, 28, and 34, Sanders teaches a method for creating a portfolio of assets/rights and liabilities having a user specifiable riskiness characteristic for the portfolio in paragraph 16. An index is understood to consist of a plurality of



assets/rights/liabilities as opposed to a single asset. Sanders teaches determining an amount of the desired portfolio that must be purchased in paragraph 16 as submitting an inquiry for a number of investment units. Sanders teaches a user specified riskiness factor in paragraph 16 as a leverage factor/share multiple.

Sanders teaches a riskiness characteristic of a resulting portfolio matches a user specified riskiness characteristic in paragraphs 53-55. In the example, the user wants a riskiness/leverage factor of ten, thus a product with a riskiness/leverage factor of ten is purchased, resulting in a portfolio with a riskiness/leverage factor of ten. Purchasing a product based on a desired portfolio (underlying index) would not change the allocation of the desired portfolio itself, thus Sanders teaches without modifying an allocation of the plurality of assets/rights/liabilities.

Sanders teaches purchasing the determined amount in paragraphs 16 and 53-55. Sanders teaches leveraged contracts but it does not clearly refer to buying on margin. Rebane teaches buying on margin (borrowed funds) as a known technique in col 10 lines 25-35. The Sanders Rebane combination does not teach the relationship of buying on margin to risk. Rangen teaches that buying on margin increases risk, and shows that the risk effects of buying on margin were known at the time of the invention. Since it was known to buy to match a riskiness characteristic (Sanders, paragraphs 53-55), and that buying on margin increases risk in known ways, it would have been obvious to combine the known elements. A person of ordinary skill in the art would have understood how to combine the elements, with predictable results and a reasonable expectation of technical success, such that the elements functioned as they did

separately. The result of the combination would be to buy on margin in order to increase risk to match a user specified riskiness characteristic. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the Sanders Rebane combination to explicitly add an amount that must be purchased on margin and purchasing on margin in order to adjust the risk of a known product with the benefit of avoiding research on other products. Thus Sanders Rebane Rangen teaches an amount that must be purchased on margin. (Note that this paragraph replies to the applicant's argument using new grounds.)

Further as to claims 7 and 34 Sanders teaches in paragraph 23 providing a predetermined portfolio of assets rights or liabilities (the list of investment products displayed to user).

Further as to claims 7 and 34, Sanders teaches receiving a user specified riskiness characteristic in paragraph 16. The reception of such a characteristic would be the same action for a characteristic based on a single product or a characteristic based on a combination of the portfolio and a user's investment funds.

Further as to claims 7 and 34, Sanders teaches a riskiness characteristic for a product, but does not teach a riskiness characteristic for a combination of assets such as a predetermined portfolio and the user's investment funds. Rebane teaches in col 33 how to determine the risk of a combination of assets. It would have been within ordinary logic to modify Sanders, with predictable results and a reasonable expectation of success, to apply Rebane's known technique, to add receiving a user specified

riskiness characteristic for the portfolio and a user's investment funds in order to allow the user to incorporate other assets into the risk determination.

Further as to claims 7 and 34, Sanders teaches purchasing an amount of the predetermined portfolio of the plurality of assets, rights, or liabilities with the user's investment funds in paragraphs 16 and 53-55.

Further as to claims 28 and 34, Sanders teaches a computer in paragraph 23. Sanders does not explicitly teach a display and a user interface and a computer readable media having encoded thereon instructions. Rebane teaches a computer in Fig 4, which shows a display and a user interface and a computer readable media (memory) having encoded thereon instructions, and a processor. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Sanders in view of Rebane to add a display and a user interface and a computer readable media having encoded thereon instructions, and a processor, in order to enable interaction with the programmed instructions.

As to claims 2 and 29, Sanders teaches selecting by a user a riskiness characteristic (share multiple) of a desired portfolio of a plurality of assets/rights/liabilities in paragraph 16.

As to claims 3 and 30, Sanders teaches a retail customer interface in the abstract. Sanders paragraph 114 says that this interface is in HTML. A person of ordinary skill in the art would understand that a customer interface in HTML would be a graphical user interface.

As to claims 6, and 33, Sanders teaches entering a numerical value (see at least Figure 5, "customer picks a leverage factor between 5 and 20" and paragraph 93).

13. Claims 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application 2001/0042036 filed by 1/25/2001 by Sanders, in view of US Patent 6078904 filed 3/16/98 by Rebane in view of Rangen and further in view of US Patent Application 20030088489 filed 12/13/2000 by Peters et al.

As to claim 55, Sanders teaches obtaining a desired riskiness characteristic for a desired portfolio of assets/rights/liabilities in Fig 5 and paragraph 93. Sanders teaches providing a predetermined portfolio of a plurality of assets /rights/liabilities having a predetermined asset allocation among the plurality of assets/rights/liabilities in paragraph 16 (index).

Sanders does not teach providing a portfolio having a predetermined riskiness characteristic. Rebane teaches in col 33 how to determine the risk of a combination of assets. Thus applying the known technique of Rebane to Sanders prior to providing the portfolio, results in a portfolio with a predetermined riskiness characteristic. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Sanders, with predictable results and a reasonable expectation of success, to add a portfolio with a predetermined riskiness characteristic, in order to match the risk tolerance of the user.

Sanders does not teach comparing the riskiness characteristic obtained previously with the predetermined riskiness characteristic of the predetermined portfolio.

Peters teaches comparing the riskiness characteristic obtained previously with the predetermined riskiness characteristic of the predetermined portfolio in paragraphs 93-94 and claim 1. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Sanders to add comparing the riskiness characteristic obtained previously with the predetermined riskiness characteristic of the predetermined portfolio in order to see whether the risk was close to the user's desires.

The Sanders Rebane Rangen combination teaches determining an amount of the predetermined portfolio that must be purchased on margin so that a resulting portfolio matches the desired riskiness characteristic and purchasing the determined amount of the desired portfolio of the plurality of assets/rights /liabilities as above (see claim 1).

Claim 55 recites that if the desired riskiness characteristic is higher ... purchasing the determined amount on margin. Claim 56 recites that if the desired riskiness characteristic is lower, purchasing a determined amount of a low risk investment in combination with an amount of the predetermined portfolio. Sanders does not teach these elements. Peters teaches in paragraph 62 comparing the desired riskiness characteristic to the predetermined portfolio riskiness characteristic, and changing the investments in the portfolio to match the desired riskiness characteristic. Peters does not specifically teach buying on margin to raise the riskiness characteristic or buying a low risk investment to lower the riskiness characteristic. Rangen teaches that buying on margin increases risk. Rebane shows in col 33 and elsewhere formulas for determining the risk of loss from a portfolio. A person of ordinary skill would understand based on

these formulas that adding a higher risk investment to a portfolio raises the risk of the portfolio, and conversely, adding a low risk investment to a portfolio lowers the risk of the portfolio. It would have been obvious to a person of ordinary skill in the art at the time of the investment to modify the Sanders Rebane Rangen combination to add the claimed elements: if the desired riskiness characteristic is higher ... purchasing the determined amount on margin, and also if the desired riskiness characteristic is lower, purchasing a determined amount of a low risk investment in combination with an amount of the predetermined portfolio. The benefit would be to match the risk tolerance of the investor.

As to claim 57, Sanders teaches selecting by a user a riskiness characteristic (share multiple) of a desired portfolio of a plurality of assets/rights/liabilities in paragraph 16.

As to claim 58, Sanders teaches a retail customer interface in the abstract. Sanders paragraph 114 says that this interface is in HTML. A person of ordinary skill in the art would understand that a customer interface in HTML would be a graphical user interface.

14. Claim 4 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen as applied above, and further in view of Nolan (5,754,873).

The Sanders Rebane Rangen combination does not specifically disclose a *slider bar*. However, Nolan discloses a graphical user interface for scaling a block of text

which "scaling preference can be selected using a graphical control, such as a slider bar or dial" (see Column 9, Lines 58-67). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the slider bar interface element of Nolan into the investment system and method of Sanders in order to provide improved usability.

15. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen in view of Peters as applied above, and further in view of Nolan (5,754,873).

The Sanders Rebane Rangen Peters combination does not specifically disclose a *slider bar*. However, Nolan discloses a graphical user interface for scaling a block of text which "scaling preference can be selected using a graphical control, such as a slider bar or dial" (see Column 9, Lines 58-67). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the slider bar interface element of Nolan into the combination of Sanders, Rebane, Rangen, and Peters in order to provide improved usability.

16. Claims 5 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen as applied above, and further in view of Marks et al. (2001/0053944).

As to claims 5 and 32, Sanders and Rebane in view of Rangen does not specifically disclose an *arrow on a dial*. However, Marks discloses a graphical user

interface for navigating internet audio which includes dials with arrows on them (see at least Figure 1). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the dials with arrows interface elements of Marks into the combination of Sanders, Rebane, Rangen, in order to provide improved usability.

17. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen in view of Peters as applied above, and further in view of Marks et al. (2001/0053944).

As to claim 60, Sanders and Rebane in view of Rangen and Peters does not specifically disclose an *arrow on a dial*. However, Marks discloses a graphical user interface for navigating internet audio which includes dials with arrows on them (see at least Figure 1). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the dials with arrows interface elements of Marks into the Marks into the combination of Sanders, Rebane, Rangen, and Peters in order to provide improved usability.

### ***Conclusion***

18. While portions of interest have been indicated, all references should be considered for the entirety of their teachings.



19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Loftus whose telephone number is 571-272-7342. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on 571-272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AL

/Susanna M. Diaz/  
Primary Examiner, Art Unit 3692